



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q85161

Hirokazu KARIYAZAKI, et al.

Appln. No.: 10/516,453

Group Art Unit: 3682

Confirmation No.: 2857

Examiner: Not Yet Assigned

Filed: December 3, 2004

For:

ARTICULATED ROBOT AND CONTROL APPARATUS OF THE SAME

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

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filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations: English language abstracts, submitted herewith, constitute concise statements of relevance for Japanese Patent Application Publication No. 2000-190258.

Korean Patent Application No. 2000-0014795 relates to a rectilinear interpolating method of a transporter of an orthogonal coordinate, and includes

- (ST21) a step of waiting an occurrence of a timer frequency to transmit a signal for starting a program processing to the CPU of the main control device;
 - (ST22) a step of calculating Pxi and Pyi on a plan route;
 - (ST23) a step of reading a position error Fxi and Fyi;
 - (ST24) a step of deriving a position increment amount ΔPxi and ΔPyi ;
 - (ST25) a step of deriving a position error increment amount Δ Fxi and Δ Fyi;
- (ST26) a step of deriving ratios Rpi and Rfi of variation of the position increment amount and the position error increment amount;
- (ST27) a step of deriving new target positions NPxi and NPyi by respectively multiplying Pxi and Pyi by a ratio between Rpi and Rfi;
 - (ST28) a step of subtracting NPxi and NPyi from increment amount to Pxn and Pyn;
 - (ST29) a sptep of transmitting new orders NPxi and NPyi to the servo;
- (ST30) a step of determining whether or not having reached the finishing point to finish the rectilinear interpolation;

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Owing to this, it is possible to minimize an error during high speed transporting so that an

actual route of a rectilinear motion by the trajectory interpolation in the X-Y table system

coincides with a plan route as a table of an orthogonal coordinate robot or a milling machine.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Q85161

/Chidambaram.S.Iyer/

Chid S. Iyer

Registration No. 43,355

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

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First Named Inventor	Hirokazu KARIYAZAKI
Art Unit	3682
Examiner Name	Not Yet Assigned
Attorney Docket Number	Q85161
	Art Unit Examiner Name

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document	Number	Publication Date MM-DD-YYYY		
		Number	Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document	
		US				
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date	Name of Patentee or	
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶
		JP	2000-190258	A	7-11-2000	SAMSUNG ELECTRONICS CO LTD.	Atstract
		KR	2000-0014795		3-15-2000	SAMSUNG ELECTRONICS CO LTD.	No
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NON PATENT LITERATURE DOCUMENTS					
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.			

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Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.